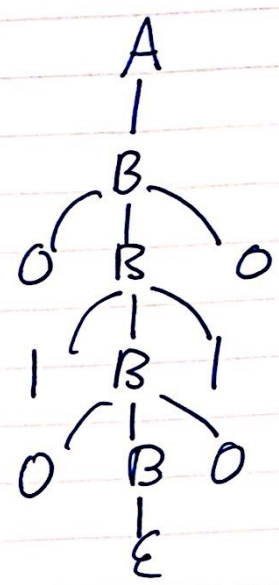


2) a) ~~$A \rightarrow B$~~
 ~~$B \rightarrow \epsilon$~~
 ~~$B \rightarrow 0A00B0$~~
 ~~$B \rightarrow 1A1B$~~

$A \rightarrow B$
 $B \rightarrow \epsilon$
 $B \rightarrow 0B0$
 $B \rightarrow 1B1$



b) $A \rightarrow BC$
 $B \rightarrow aBb$
 $B \rightarrow \epsilon$
 $C \rightarrow cC$
 $C \rightarrow \epsilon$

c) $S \rightarrow S$
 $S \rightarrow AB$
 $A \rightarrow aA$
 $B \rightarrow bBc$
 $A \rightarrow B \rightarrow \epsilon$

d) $S \rightarrow S$
 $S \rightarrow abS$
 $S \rightarrow \epsilon$

$S \rightarrow S$
 $S \rightarrow Sab$
 $S \rightarrow \epsilon$

4) $S \rightarrow S$
 $S \rightarrow aS$
 $S \rightarrow aSbS$
 $S \rightarrow \epsilon$

